### U.S. DEPARTMENT OF EDUCATION OFFICE OF SPECIAL EDUCATION AND REHABILITATIVE SERVICES WASHINGTON, D.C. 20202-2575

#### FY 2012 APPLICATION PACKAGE FOR NEW GRANTS

UNDER
THE NATIONAL INSTITUTE ON DISABILITY AND REHABILITATION
RESEARCH

REHABILITATION ENGINEERING RESEARCH CENTERS (RERC)

Recreational Technologies and Exercise Physiology Benefiting
Individuals with Disabilities
CFDA NUMBER: 84.133E-1

AND

Rehabilitation Robotics
CFDA NUMBER: 84.133E-3

**FORM APPROVED** 



OMB No. 1820-0027, EXP. DATE 03/31/2013 SF FORM 424, 1/31/2012

**DATED MATERIAL - OPEN IMMEDIATELY** 

**CLOSING DATE: August 14, 2012** 

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# SECTION A DEAR APPLICANT LETTER

June 20, 2012

#### Dear Applicant:

The Secretary invites applications for new awards in fiscal year (FY) 2012 under the Rehabilitation Engineering Research Centers program, for a Center on Recreational Technologies and Exercise Physiology for Individuals With Disabilities (CFDA Number 84.133E-1) and for a Center on Rehabilitation Robotics (CFDA Number 84.133E-3).

NIDRR is seeking applications that address all elements of the priority, and that propose appropriate, high-quality research methodologies. It is critical that proposals describe expected public benefits, especially benefits for individuals with disabilities, and propose projects that are designed to demonstrate outcomes that are consistent with the proposed goals.

The start date for new awards for the (FY) 2012 programs will be no later than October 1, 2012.

#### APPLICATION PROCEDURES

This application package contains information and the required forms for potential applicants to apply and be considered for a FY 2012 grant award under this competition, including the published Federal Register notice dated (June 20, 2012). The background statement from the Notice of Proposed Priorities is in Section D.

The closing date (application deadline) is **August 14**, **2012**.

Potential applicants are advised to read the materials in this application package carefully. Please pay particular attention to the information contained in the Notice Inviting Applications on the eligible applicants and the dollar amount available for this competition, Section F – the Selection Criteria, Section G – Protection of Human Subjects, and Section H – Application Format and Instructions. Applications must be responsive to the absolute priority in Section C and the statutory, regulatory, and general requirements for the RRTC program in Section E. The application narrative should be written in the order of the selection criteria in Section F. The selection criteria will be used by the reviewers to evaluate the application.

#### Page 2, Dear Applicant

**Include a one page abstract**. The abstract is a critical component of the proposal, and it should describe the purpose, target population to be served during the project period, planned goals and objectives, proposed methodological approach, and anticipated project outcomes.

#### Award Amounts and Indirect Cost Rate

We will reject any application that proposes a budget exceeding the amount of \$950,000 for a single budget period of 12 months. The indirect cost rate is your institution's federally negotiated rate.

#### APPLICATION SUBMISSION PROCEDURES

You **must** submit your application electronically using the Grants.gov Apply site. See Section B, Notice Inviting Applications and Section J, Application Transmittal Instructions.

**NOTE**: You will be uploading sections of your application by heading. There is a heading for: (1) Application for Federal Assistance (SF 424); (2) Table of Contents; (3) Abstract; (4) ED Budget Information Non-Construction Programs (ED-524); (5) Budget Narrative; (6) Project Narrative; (7) General Education Provisions Act (GEPA) Requirements – Section 427; (8) GG Lobbying Form (90-0013); (9) Faith Based Survey on EEO; (10) ED Supplemental Form for SF 424; (11) SF LLL Disclosure of Lobbying; and (12) Vitae/Bibliography/Letters of Support. There is a file size limitation to each section, and you may upload only one document under each heading. Therefore, in order to make sure that all of your materials are uploaded successfully, you will need to combine multiple original documents for a heading (e.g., letters, resumes) into a single document before uploading.

**Please note**: You **must** upload any narrative sections and all other attachments to your application as files in a PDF (Portable Document) read-only, non-modifiable format. Do not upload an interactive or fillable PDF file. If you upload a file type other than a read-only, non-modifiable PDF or submit a password-protected file, we will not review that material.

Electronic copies must be <u>fully uploaded</u> on the Grants.gov site by 4:30:00 pm, Washington DC time on the revised closing date, **August 14, 2012**. It may take up to several hours for this process. Please allow several hours or a full day to submit your application. If there is a submission error, additional time will be needed to correct the error and resubmit. **We encourage you to read Section J – Grants.gov Submission Procedures and Tips for Applicants** 

#### PROGRAM REGULATIONS

These grants are subject to the requirements of the Education Department General Administrative Regulations (EDGAR), in 34 CFR Parts 74, 75, 77, 80, 81, 82, 84, 85,

86, and 97, which set forth general rules affecting the submittal, review, grant award, and post-award administration for Department of Education grant programs.

#### TECHNICAL ASSISTANCE

Pre-Application Meeting: A pre-application meeting will be held between 1:00 p.m. and 3:00 p.m. on July 11, 2012 by teleconference. Interested parties are invited to participate in the pre-application meeting to discuss the funding priority and to receive information and technical assistance. You must contact Marlene Spencer at marlene.spencer@ed.gov) by July 10, 2012 in order to participate in this meeting. NIDRR staff also will be available to provide information and technical assistance via individual phone consultations from 3:30 p.m. to 4:30 p.m. on July 11, 2012. Requests for individual consultations during this one-hour window must be made in advance to Marlene Spencer.

If you have any questions about the information in this application package, please contact Marlene Spencer at marlene.spencer@ed.gov or by telephone at (202) 245-7532 or Lynn Medley at lynn.medley@ed.gov or by telephone at (202) 245-7338. Individuals who use a telecommunications device (TDD) may call the Federal Relay Service (FRS) at 1-800-877-8339 between 8:00 a.m. and 4:00 p.m., EST, Monday through Friday.

If you experience problems submitting your application through Grants.gov, please contact the Grants.gov Support Desk, toll free, at 1-800-518-4726. Thank you for your interest in this program.

Sincerely,

K. Charlie LakinDirector,National Institute on Disability andRehabilitation Research

### **SECTION B**

## NOTICE INVITING APPLICATIONS FOR NEW AWARDS

4000-01-U

DEPARTMENT OF EDUCATION

Applications for New Awards; National Institute on Disability and Rehabilitation Research--Disability and Rehabilitation Research Projects and Centers Program--Rehabilitation Engineering Research Centers (RERCs)

AGENCY: Office of Special Education and Rehabilitative Services,
Department of Education

ACTION: Notice.

#### Overview Information:

National Institute on Disability and Rehabilitation Research
(NIDRR) -- Disability and Rehabilitation Research Projects and
Centers Program -- RERCs -- Recreational Technologies and Exercise
Physiology Benefiting Individuals with Disabilities and
Rehabilitation Robotics.

Notice inviting applications for new awards for fiscal year (FY) 2012.

Catalog of Federal Domestic Assistance (CFDA) Number: 84.133E-1 and 84.133E-3.

#### Dates:

Applications Available: June 20, 2012.

Date of Pre-Application Meeting: July 11, 2012.

Deadline for Transmittal of Applications: August 14, 2012.

Full Text of Announcement

I. Funding Opportunity Description

Purpose of Program: The purpose of the Disability and Rehabilitation Research Projects and Centers Program is to plan and conduct research, demonstration projects, training, and related activities, including international activities, to develop methods, procedures, and rehabilitation technologies that maximize the full inclusion and integration of individuals with disabilities into society, and support the employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities; and to improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended (Rehabilitation Act).

#### Rehabilitation Engineering Research Centers Program (RERCs)

The purpose of the RERCs, which are funded through the Disability and Rehabilitation Research Projects and Centers Program, is to improve the effectiveness of services authorized under the Rehabilitation Act by conducting advanced engineering research on and development of innovative technologies that are designed to solve particular rehabilitation problems, or to remove environmental barriers. RERCs also demonstrate and evaluate such technologies, facilitate service delivery system changes, stimulate the production and distribution of new technologies and equipment in the private sector, and provide training opportunities for early-career rehabilitation engineers. RERCs seek to solve rehabilitation problems and remove environmental barriers to improvements in employment,

community living and participation, and health and function outcomes of individuals with disabilities.

<u>Priority</u>: These priorities are from the notice of final priorities for this program, published elsewhere in this issue of the Federal Register.

Absolute Priorities: For FY 2012 and any subsequent year in which we make awards from the list of unfunded applicants from this competition, these priorities are absolute priorities.

Under 34 CFR 75.105(c)(3) we consider only applications that meet one of the following priorities.

These priorities are:

<u>84.133E-1--Recreational Technologies and Exercise</u>

<u>Physiology Benefiting Individuals with Disabilities.</u>

84.133E-3--Rehabilitation Robotics.

Note: The full text of these priorities is included in the notice of final priorities published elsewhere in this issue of the <a href="Federal Register">Federal Register</a> and in the application package for this competition.

Program Authority: 29 U.S.C. 762(g) and 764(b)(3).

Applicable Regulations: (a) The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 75, 77, 80, 81, 82, 84, 86, and 97. (b) The Education Department suspension and debarment regulations in 2 CFR part 3485. (c) The regulations for this program in 34 CFR part 350. (d) The notice of final priority for this program, published elsewhere in this issue of the Federal Register.

Note: The regulations in 34 CFR part 86 apply to institutions of higher education (IHEs) only.

#### II. Award Information

Type of Award: Discretionary grants.

Estimated Available Funds: \$1,900,000.

Contingent upon the availability of funds and the quality of applications, we may make additional awards in FY 2013 from the list of unfunded applicants from this competition.

Maximum Award: We will reject any application that proposes a budget exceeding \$950,000 for a single budget period of 12 months. The Assistant Secretary for Special Education and Rehabilitative Services may change the maximum amount through a notice published in the Federal Register.

Estimated Number of Awards: 1 for the RERC on Recreational Technologies and Exercise Physiology Benefiting Individuals with Disabilities (CFDA No. 84.133E-1) and 1 for Rehabilitation Robotics (CFDA No. 84.133E-3).

 $\underline{\text{Note}}$ : The Department is not bound by any estimates in this notice.

Project Period: Up to 60 months.

#### III. Eligibility Information

1. Eligible Applicants: States; public or private agencies, including for-profit agencies; public or private organizations, including for-profit organizations; IHEs; and Indian tribes and tribal organizations.

- 2. <u>Cost Sharing or Matching</u>: This competition does not require cost sharing or matching.
- IV. Application and Submission Information
- 1. Address to Request Application Package: You can obtain an application package via the Internet or from the Education Publications Center (ED Pubs). To obtain a copy via the Internet, use the following address:

  www.ed.gov/fund/grant/apply/grantapps/index.html.

To obtain a copy from ED Pubs, write, fax, or call the following: ED Pubs, U.S. Department of Education, P.O. Box 22207, Alexandria, VA 22304. Telephone, toll free: 1-877-433-7827. FAX: (703) 605-6794. If you use a telecommunications device for the deaf (TDD) or a text telephone (TTY), call, toll free: 1-877-576-7734.

You can contact ED Pubs at its Web site, also: www.EDPubs.gov or at its e-mail address: edpubs@inet.ed.gov.

If you request an application from ED Pubs, be sure to identify this competition as follows: CFDA numbers 84.133E-1 and 84.133E-3.

Individuals with disabilities can obtain a copy of the application package in an accessible format (e.g., braille, large print, audiotape, or compact disc) by contacting the person or team listed under <u>Accessible Format</u> in section VIII of this notice.

2. a. <u>Content and Form of Application Submission</u>:

Requirements concerning the content of an application, together

with the forms you must submit, are in the application package for this competition.

Page Limit: The application narrative (Part III of the application) is where you, the applicant, address the selection criteria that reviewers use to evaluate your application. We recommend that you limit the application narrative (Part III) to the equivalent of no more than 100 pages, using the following standards:

- A "page" is 8.5" x 11", on one side only, with 1" margins at the top, bottom, and both sides.
- Double space (no more than three lines per vertical inch) all text in the application narrative, including titles, headings, footnotes, quotations, references, and captions, as well as all text in charts, tables, figures, and graphs.
- Use a font that is either 12 point or larger or no smaller than 10 pitch (characters per inch).
- Use one of the following fonts: Times New Roman, Courier, Courier New, or Arial.

The recommended page limit does not apply to Part I, the cover sheet; Part II, the budget section, including the narrative budget justification; Part IV, the assurances and certifications; or the one-page abstract, the resumes, the bibliography, or the letters of support. However, the recommended page limit does apply to all of the application narrative section (Part III).

The application package will provide instructions for completing all components to be included in the application.

Each application must include a cover sheet (Standard Form 424); budget requirements (ED Form 524) and narrative justification; other required forms; an abstract, Human Subjects narrative, Part III narrative; resumes of staff; and other related materials, if applicable.

#### 2. b. Submission of Proprietary Information:

Given the types of projects that may be proposed in applications for this competition, an application may include business information that an applicant considers proprietary.

The Department's regulations define "business information" in 34 CFR 5.11.

The Department is planning to post on its Web site the narrative portion of the applications selected for funding under this competition. Upon receipt of award under this competition, applicants selected for funding must identify any business information contained in their application that they wish to be treated as confidential. Identifying confidential business information in the submitted application will help facilitate this public disclosure process.

2. c. Accessibility of Application Narratives. To ensure accessibility of application information posted on the Department's Web site, applicants selected for funding under this competition will be required to provide an electronic copy of the narrative portion of their application that is accessible

to individuals with disabilities. Guidelines on preparing accessible documents in various formats are available at: http://www2.ed.gov/internal/internalguidelines.html

#### 3. Submission Dates and Times:

Applications Available: June 20, 2012.

Date of Pre-Application Meeting: Interested parties are invited to participate in a pre-application meeting and to receive information and technical assistance through individual consultation with NIDRR staff. The pre-application meeting will be held July 11, 2012. Interested parties may participate in this meeting by conference call with NIDRR staff from the Office of Special Education and Rehabilitative Services between 1:00 p.m. and 3:00 p.m., Washington, DC time. NIDRR staff also will be available from 3:30 p.m. to 4:30 p.m., Washington, DC time, on the same day, by telephone, to provide information and technical assistance through individual consultation. For further information or to make arrangements to participate in the meeting via conference call or for an individual consultation, contact either Lynn Medley or Marlene Spencer as follows:

Lynn Medley, U.S. Department of Education, 400 Maryland Avenue, SW., room 5140, Potomac Center Plaza (PCP), Washington, DC 20202-2700. Telephone: (202) 245-7338 or by e-mail: Lynn.Medley@ed.gov.

Marlene Spencer, U.S. Department of Education, 400 Maryland Avenue, SW., room 5133, PCP, Washington, DC 20202-2700.

Telephone: (202) 245-7532 or by e-mail: Marlene.Spencer@ed.gov.

Deadline for Transmittal of Applications: August 14, 2012.

Applications for grants under this competition must be submitted electronically using the Grants.gov Apply site (Grants.gov). For information (including dates and times) about how to submit your application electronically, or in paper format by mail or hand delivery if you qualify for an exception to the electronic submission requirement, please refer to section IV. 7. Other Submission Requirements of this notice.

We do not consider an application that does not comply with the deadline requirements.

Individuals with disabilities who need an accommodation or auxiliary aid in connection with the application process should contact one of the individuals listed under <a href="For Further">For Further</a>
<a href="Information Contact">Information Contact</a> in section VII of this notice. If the Department provides an accommodation or auxiliary aid to an individual with a disability in connection with the application process, the individual's application remains subject to all other requirements and limitations in this notice.

- 4. <u>Intergovernmental Review</u>: This program is not subject to Executive Order 12372 and the regulations in 34 CFR part 79.
- 5. <u>Funding Restrictions</u>: We reference regulations outlining funding restrictions in the <u>Applicable Regulations</u> section in this notice.

- 6. <u>Data Universal Numbering System Number, Taxpayer</u>

  <u>Identification Number, and Central Contractor Registry</u>: To do

  business with the Department of Education, you must--
- a. Have a Data Universal Numbering System (DUNS) number and a Taxpayer Identification Number (TIN);
- b. Register both your DUNS number and TIN with the Central Contractor Registry (CCR), the Government's primary registrant database;
  - c. Provide your DUNS number and TIN on your application; and
- d. Maintain an active CCR registration with current information while your application is under review by the Department and, if you are awarded a grant, during the project period.

You can obtain a DUNS number from Dun and Bradstreet. A DUNS number can be created within one business day.

If you are a corporate entity, agency, institution, or organization, you can obtain a TIN from the Internal Revenue Service. If you are an individual, you can obtain a TIN from the Internal Revenue Service or the Social Security Administration. If you need a new TIN, please allow 2-5 weeks for your TIN to become active.

The CCR registration process may take five or more business days to complete. If you are currently registered with the CCR, you may not need to make any changes. However, please make certain that the TIN associated with your DUNS number is correct. Also

note that you will need to update your registration annually. This may take three or more business days to complete.

In addition, if you are submitting your application via Grants.gov, you must (1) be designated by your organization as an Authorized Organization Representative (AOR); and (2) register yourself with Grants.gov as an AOR. Details on these steps are outlined at the following Grants.gov Web page: www.grants.gov/applicants/get registered.jsp.

- 7. Other Submission Requirements: Applications for grants under this competition must be submitted electronically unless you qualify for an exception to this requirement in accordance with the instructions in this section.
  - a. Electronic Submission of Applications.

Applications for grants under the Recreational Technologies and Exercise Physiology Benefiting Individuals with

Disabilities, CFDA number 84.133E-1 and Rehabilitation Robotics,

CFDA number 84.133E-3, must be submitted electronically using the Governmentwide Grants.gov Apply site at www.Grants.gov.

Through this site, you will be able to download a copy of the application package, complete it offline, and then upload and submit your application. You may not e-mail an electronic copy of a grant application to us.

We will reject your application if you submit it in paper format unless, as described elsewhere in this section, you qualify for one of the exceptions to the electronic submission requirement and submit, no later than two weeks before the

application deadline date, a written statement to the Department that you qualify for one of these exceptions. Further information regarding calculation of the date that is two weeks before the application deadline date is provided later in this section under Exception to Electronic Submission Requirement.

You may access the electronic grant applications for this competition at www.Grants.gov. You must search for the downloadable application package for this competition by the CFDA number. Do not include the CFDA number's alpha suffix in your search (e.g., search for 84.133, not 84.133E).

Please note the following:

- When you enter the Grants.gov site, you will find information about submitting an application electronically through the site, as well as the hours of operation.
- Applications received by Grants.gov are date and time stamped. Your application must be fully uploaded and submitted and must be date and time stamped by the Grants.gov system no later than 4:30:00 p.m., Washington, DC time, on the application deadline date. Except as otherwise noted in this section, we will not accept your application if it is received—that is, date and time stamped by the Grants.gov system—after 4:30:00 p.m., Washington, DC time, on the application deadline date. We do not consider an application that does not comply with the deadline requirements. When we retrieve your application from Grants.gov, we will notify you if we are rejecting your application because it was date and time stamped by the

Grants.gov system after 4:30:00 p.m., Washington, DC time, on the application deadline date.

- The amount of time it can take to upload an application will vary depending on a variety of factors, including the size of the application and the speed of your Internet connection.

  Therefore, we strongly recommend that you do not wait until the application deadline date to begin the submission process through Grants.gov.
- You should review and follow the Education Submission

  Procedures for submitting an application through Grants.gov that

  are included in the application package for this competition to

  ensure that you submit your application in a timely manner to

  the Grants.gov system. You can also find the Education

  Submission Procedures pertaining to Grants.gov under News and

  Events on the Department's G5 system home page at

  http://www.G5.gov.
- You will not receive additional point value because you submit your application in electronic format, nor will we penalize you if you qualify for an exception to the electronic submission requirement, as described elsewhere in this section, and submit your application in paper format.
- You must submit all documents electronically, including all information you typically provide on the following forms: the Application for Federal Assistance (SF 424), the Department of Education Supplemental Information for SF 424, Budget

Information--Non-Construction Programs (ED 524), and all necessary assurances and certifications.

- You must upload any narrative sections and all other attachments to your application as files in a PDF (Portable Document) read-only, non-modifiable format. Do not upload an interactive or fillable PDF file. If you upload a file type other than a read-only, non-modifiable PDF or submit a password-protected file, we will not review that material.
- Your electronic application must comply with any pagelimit requirements described in this notice.
- After you electronically submit your application, you will receive from Grants.gov an automatic notification of receipt that contains a Grants.gov tracking number. (This notification indicates receipt by Grants.gov only, not receipt by the Department.) The Department then will retrieve your application from Grants.gov and send a second notification to you by e-mail. This second notification indicates that the Department has received your application and has assigned your application a PR/Award number (an ED-specified identifying number unique to your application).
- We may request that you provide us original signatures on forms at a later date.

Application Deadline Date Extension in Case of Technical Issues with the Grants.gov System: If you are experiencing problems submitting your application through Grants.gov, please contact the Grants.gov Support Desk, toll free, at 1-800-518-4726. You

must obtain a Grants.gov Support Desk Case Number and must keep a record of it.

If you are prevented from electronically submitting your application on the application deadline date because of technical problems with the Grants.gov system, we will grant you an extension until 4:30:00 p.m., Washington, DC time, the following business day to enable you to transmit your application electronically or by hand delivery. You also may mail your application by following the mailing instructions described elsewhere in this notice.

If you submit an application after 4:30:00 p.m.,
Washington, DC time, on the application deadline date, please
contact the person listed under For Further Information Contact
in section VII of this notice and provide an explanation of the
technical problem you experienced with Grants.gov, along with
the Grants.gov Support Desk Case Number. We will accept your
application if we can confirm that a technical problem occurred
with the Grants.gov system and that that problem affected your
ability to submit your application by 4:30:00 p.m., Washington,
DC time, on the application deadline date. The Department will
contact you after a determination is made on whether your
application will be accepted.

Note: The extensions to which we refer in this section apply only to the unavailability of, or technical problems with, the Grants.gov system. We will not grant you an extension if you failed to fully register to submit your application to

Grants.gov before the application deadline date and time or if the technical problem you experienced is unrelated to the Grants.gov system.

Exception to Electronic Submission Requirement: You qualify for an exception to the electronic submission requirement, and may submit your application in paper format, if you are unable to submit an application through the Grants.gov system because—

- You do not have access to the Internet; or
- You do not have the capacity to upload large documents to the Grants.gov system;

#### and

• No later than two weeks before the application deadline date (14 calendar days or, if the fourteenth calendar day before the application deadline date falls on a Federal holiday, the next business day following the Federal holiday), you mail or fax a written statement to the Department, explaining which of the two grounds for an exception prevent you from using the Internet to submit your application.

If you mail your written statement to the Department, it must be postmarked no later than two weeks before the application deadline date. If you fax your written statement to the Department, we must receive the faxed statement no later than two weeks before the application deadline date.

Address and mail or fax your statement to: Marlene Spencer, U.S. Department of Education, 400 Maryland Avenue, SW.,

room 5133, PCP, Washington, DC 20202-2700. FAX: (202) 245-7323.

Your paper application must be submitted in accordance with the mail or hand delivery instructions described in this notice.

#### b. Submission of Paper Applications by Mail.

If you qualify for an exception to the electronic submission requirement, you may mail (through the U.S. Postal Service or a commercial carrier) your application to the Department. You must mail the original and two copies of your application, on or before the application deadline date, to the Department at the following address:

U.S. Department of Education
Application Control Center
Attention: (CFDA Number 84.133E-1 or 84.133E-3)
LBJ Basement Level 1
400 Maryland Avenue, SW.
Washington, DC 20202-4260

You must show proof of mailing consisting of one of the following:

- (1) A legibly dated U.S. Postal Service postmark.
- (2) A legible mail receipt with the date of mailing stamped by the U.S. Postal Service.
- (3) A dated shipping label, invoice, or receipt from a commercial carrier.
- (4) Any other proof of mailing acceptable to the Secretary of the U.S. Department of Education.

If you mail your application through the U.S. Postal Service, we do not accept either of the following as proof of mailing:

- (1) A private metered postmark.
- (2) A mail receipt that is not dated by the U.S. Postal Service.

If your application is postmarked after the application deadline date, we will not consider your application.

Note: The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, you should check with your local post office.

c. Submission of Paper Applications by Hand Delivery.

If you qualify for an exception to the electronic submission requirement, you (or a courier service) may deliver your paper application to the Department by hand. You must deliver the original and two copies of your application by hand, on or before the application deadline date, to the Department at the following address:

U.S. Department of Education Application Control Center Attention: (CFDA Number 84.133E-1 or 84.133E-3) 550 12th Street, SW. Room 7041, Potomac Center Plaza Washington, DC 20202-4260

The Application Control Center accepts hand deliveries daily between 8:00 a.m. and 4:30:00 p.m., Washington, DC time, except Saturdays, Sundays, and Federal holidays.

Note for Mail or Hand Delivery of Paper Applications: If you mail or hand deliver your application to the Department--

- (1) You must indicate on the envelope and—if not provided by the Department—in Item 11 of the SF 424 the CFDA number, including suffix letter, if any, of the competition under which you are submitting your application; and
- (2) The Application Control Center will mail to you a notification of receipt of your grant application. If you do not receive this notification within 15 business days from the application deadline date, you should call the U.S. Department of Education Application Control Center at (202) 245-6288.

#### V. Application Review Information

- 1. <u>Selection Criteria</u>: The selection criteria for this competition are from 34 CFR 350.54 and are listed in the application package.
- 2. Review and Selection Process: We remind potential applicants that in reviewing applications in any discretionary grant competition, the Secretary may consider, under 34 CFR 75.217(d)(3), the past performance of the applicant in carrying out a previous award, such as the applicant's use of funds, achievement of project objectives, and compliance with grant conditions. The Secretary may also consider whether the applicant failed to submit a timely performance report or submitted a report of unacceptable quality.

In addition, in making a competitive grant award, the Secretary also requires various assurances including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal

financial assistance from the Department of Education (34 CFR 100.4, 104.5, 106.4, 108.8, and 110.23).

3. Special Conditions: Under 34 CFR 74.14 and 80.12, the Secretary may impose special conditions on a grant if the applicant or grantee is not financially stable; has a history of unsatisfactory performance; has a financial or other management system that does not meet the standards in 34 CFR parts 74 or 80, as applicable; has not fulfilled the conditions of a prior grant; or is otherwise not responsible.

#### VI. Award Administration Information

1. Award Notices: If your application is successful, we notify your U.S. Representative and U.S. Senators and send you a Grant Award Notification (GAN). We may notify you informally, also.

If your application is not evaluated or not selected for funding, we notify you.

2. Administrative and National Policy Requirements: We identify administrative and national policy requirements in the application package and reference these and other requirements in the Applicable Regulations section of this notice.

We reference the regulations outlining the terms and conditions of an award in the <u>Applicable Regulations</u> section of this notice and include these and other specific conditions in the GAN. The GAN also incorporates your approved application as part of your binding commitments under the grant.

- 3. Reporting: (a) If you apply for a grant under this competition, you must ensure that you have in place the necessary processes and systems to comply with the reporting requirements in 2 CFR part 170 should you receive funding under the competition. This does not apply if you have an exception under 2 CFR 170.110(b).
- (b) At the end of your project period, you must submit a final performance report, including financial information, as directed by the Secretary. If you receive a multi-year award, you must submit an annual performance report that provides the most current performance and financial expenditure information as directed by the Secretary under 34 CFR 75.118. The Secretary may also require more frequent performance reports under 34 CFR 75.720(c). For specific requirements on reporting, please go to www.ed.gov/fund/grant/apply/appforms/appforms.html.
- 4. Performance Measures: To evaluate the overall success of its research program, NIDRR assesses the quality of its funded projects through a review of grantee performance and products. Each year, NIDRR examines a portion of its grantees to determine:
- The percentage of NIDRR-supported fellows, post-doctoral trainees, and doctoral students who publish results of NIDRR-sponsored research in refereed journals.
- The number of accomplishments (e.g., new or improved tools, methods, discoveries, standards, interventions, programs, or devices) developed or tested with NIDRR funding that have

been judged by expert panels to be of high quality and to advance the field.

- The average number of publications per award based on NIDRR-funded research and development activities in refereed journals.
- The percentage of new NIDRR grants that assess the effectiveness of interventions, programs, and devices using rigorous methods.
- The number of new or improved NIDRR-funded assistive and universally designed technologies, products, and devices transferred to industry for potential commercialization.

NIDRR uses information submitted by grantees as part of their Annual Performance Reports (APRs) for these reviews.

Department of Education program performance reports, which include information on NIDRR programs, are available on the Department's Web site:

www.ed.gov/about/offices/list/opepd/sas/index.html.

5. <u>Continuation Awards</u>: In making a continuation award, the Secretary may consider, under 34 CFR 75.253, the extent to which a grantee has made "substantial progress toward meeting the objectives in its approved application." This consideration includes the review of a grantee's progress in meeting the targets and projected outcomes in its approved application, and whether the grantee has expended funds in a manner that is consistent with its approved application and budget. In making a continuation grant, the Secretary also considers whether the

grantee is operating in compliance with the assurances in its approved application, including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department (34 CFR 100.4, 104.5, 106.4, 108.8, and 110.23).

VII. Agency Contacts

For Further Information Contact: Lynn Medley or Marlene Spencer as follows:

Lynn Medley, U.S. Department of Education, 400 Maryland Avenue, SW., room 5140, PCP, Washington, DC 20202-2700.

Telephone: (202) 245-7338 or by e-mail: Lynn.Medley@ed.gov.

Marlene Spencer, U.S. Department of Education, 400 Maryland Avenue, SW., room 5133, PCP, Washington, DC 20202-2700.

Telephone: (202) 245-7532 or by e-mail:

Marlene.Spencer@ed.gov.

If you use a TDD or a TTY call the Federal Relay Service (FRS), toll free, at 1-800-877-8339.

VIII. Other Information

Accessible Format: Individuals with disabilities can obtain this document and a copy of the application package in an accessible format (e.g., braille, large print, audiotape, or compact disc) by contacting the Grants and Contracts Services Team, U.S. Department of Education, 400 Maryland Avenue, SW., room 5075, PCP, Washington, DC 20202-2550. Telephone: (202) 245-7363. If you use a TDD or a TTY call FRS, toll-free, at 1-800-877-8339.

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You may also access documents of the Department published in the <u>Federal Register</u> by using the article search feature at: www.federalregister.gov. Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Dated:

Alexa Posny,

Assistant Secretary for

Special Education and

Rehabilitative Services

### **SECTION C**

# NOTICE OF FINAL PRIORITY NOTICE Published: June 20, 2012

4000-01-U

#### DEPARTMENT OF EDUCATION

CFDA Number: 84.133E-1 and 84.133E-3

Final Priorities; National Institute on Disability and
Rehabilitation Research (NIDRR) -- Disability and Rehabilitation
Research Projects and Centers Program--Rehabilitation
Engineering Research Centers (RERC)

Catalog of Federal Domestic Assistance (CFDA) Number: 84.133E-1 and 84.133E-3.

AGENCY: Office of Special Education and Rehabilitative Services, Department of Education.

ACTION: Notice.

SUMMARY: The Assistant Secretary for Special Education and Rehabilitative Services announces two priorities for RERCs: Recreational Technologies and Exercise Physiology Benefiting Individuals with Disabilities (Priority 1) and Rehabilitation Robotics (Priority 2). The Assistant Secretary may use one or both of these priorities for competitions in fiscal year (FY) 2012 and later years. We take this action to focus research attention on areas of national need. We intend to use these priorities to improve rehabilitation services and outcomes for individuals with disabilities.

EFFECTIVE DATE: These priorities are effective July 20, 2012. FOR FURTHER INFORMATION CONTACT: Marlene Spencer, U.S. Department of Education, 400 Maryland Avenue, SW., room 5133, Potomac Center Plaza (PCP), Washington, DC 20202-2700.

Telephone: (202) 245-7532 or by e-mail: marlene.spencer@ed.gov.

If you use a telecommunications device for the deaf (TDD) or a text telephone (TTY), call the Federal Relay Service (FRS), toll free, at 1-800-877-8339.

#### SUPPLEMENTARY INFORMATION:

This notice of final priorities (NFP) is in concert with NIDRR's currently approved Long-Range Plan (Plan). The Plan, which was published in the <u>Federal Register</u> on February 15, 2006 (71 FR 8165), can be accessed on the Internet at the following site: www.ed.gov/about/offices/list/osers/nidrr/policy.html.

Through the implementation of the Plan, NIDRR seeks to:

(1) improve the quality and utility of disability and rehabilitation research; (2) foster an exchange of expertise, information, and training to facilitate the advancement of knowledge and understanding of the unique needs of traditionally underserved populations; (3) determine the best strategies and programs to improve rehabilitation outcomes for underserved populations; (4) identify research gaps; (5) identify mechanisms of integrating research and practice; and (6) disseminate findings.

This notice announces two priorities that NIDRR intends to use for RERC competitions in FY 2012 and possibly later years.

However, nothing precludes NIDRR from publishing additional priorities, if needed. Furthermore, NIDRR is under no obligation to make an award for these priorities. The decision

to make an award will be based on the quality of applications received and available funding.

#### Purpose of Program:

The purpose of the Disability and Rehabilitation Research Projects and Centers Program is to plan and conduct research, demonstration projects, training, and related activities, including international activities; to develop methods, procedures, and rehabilitation technologies that maximize the full inclusion and integration of individuals with disabilities into society, and support the employment, independent living, family support, and economic and social self-sufficiency of individuals with disabilities, especially individuals with the most severe disabilities; and to improve the effectiveness of services authorized under the Rehabilitation Act of 1973, as amended (Rehabilitation Act).

#### Rehabilitation Engineering Research Centers Program (RERCs)

The purpose of the NIDRR's RERCs, which are funded through the Disability and Rehabilitation Research Projects and Centers Program, is to improve the effectiveness of services authorized under the Rehabilitation Act by conducting advanced engineering research on and development of innovative technologies that are designed to solve particular rehabilitation problems, or to remove environmental barriers. RERCs also demonstrate and evaluate such technologies, facilitate service delivery system changes, stimulate the production and distribution of new technologies and equipment in the private sector, and provide

training opportunities for early-career rehabilitation engineers. RERCs seek to solve rehabilitation problems and remove environmental barriers to improvements in employment, community living and participation, and health and function outcomes of individuals with disabilities.

The general requirements for RERCs are set out in subpart D of 34 CFR part 350 (What Rehabilitation Engineering Research Centers Does the Secretary Assist?).

Additional information on the RERC program can be found at: www.ed.gov/rschstat/research/pubs/index.html.

Program Authority: 29 U.S.C. 762(g) and 764(b)(3).

Applicable Program Regulations: 34 CFR part 350.

We published a notice of proposed priorities (NPP) for NIDRR's Disability and Rehabilitation Research Projects and Centers Program in the <u>Federal Register</u> on April 10, 2012 (77 FR 21547). That notice contained background information and our reasons for proposing the particular priorities.

<u>Public Comment</u>: In response to our invitation in the NPP, one party submitted comments on one of the proposed priorities.

Generally, we do not address technical and other minor changes. In addition, we do not address general comments that raised concerns not directly related to the proposed priorities.

Analysis of Comments and Changes: An analysis of the comments and of any changes in the priorities since publication of the NPP follows.

# Recreational Technologies and Exercise Physiology Benefiting Individuals with Disabilities

Comment: One commenter requested that NIDRR revise the priority statement to more clearly state that the priority is relevant to populations across the lifespan - including children. This commenter also suggested that the priority should focus more clearly on preventing negative health and functioning outcomes, and that these prevention efforts should be aimed at children. Discussion: Regarding the commenter's suggestion about the populations to be served under this priority, we note that nothing in the priority precludes applicants from proposing research and development projects that focus on the health and functioning of children with disabilities, or individuals with disabilities across the lifespan. However, NIDRR does not believe it is appropriate to require all applicants to define their target population in this way, because we do not wish to preclude applicants from proposing promising research and development projects that focus on other target populations. Applicants are expected to describe and justify their target population(s) in their proposals. The peer review panel will evaluate the merits of each application.

NIDRR agrees with the commenter that the priority should focus on preventing negative health and functioning outcomes. In fact, one of the stated outcomes of the RERC's activities is "to improve physical health and reduce debilitating secondary conditions associated with disability and sedentary lifestyle."

Given this language in the priority, we do not believe any changes are necessary to address the commenter's concern.

Changes: None.

Comment: None.

<u>Discussion</u>: NIDRR has decided to withdraw the proposed requirement that each funded RERC conduct a state-of-the science conference. Instead, NIDRR has added language to the fourth bulleted requirement related to dissemination to clarify that a state-of-the-science conference could be one possible means of disseminating the RERC's findings.

Changes: NIDRR has removed the requirement (reflected in the fifth proposed bulleted requirement applicable to both priorities) that each RERC conduct a state-of-the-science conference on its designated priority research area in the fourth year of the project period, and publish a comprehensive report on the final outcomes of the conference in the fifth year of the project period. We also have added language to the fourth bulleted requirement applicable to both priorities, related to dissemination. Finally, NIDRR has deleted the language that referred to the National Center for Dissemination of Disability Research. NIDRR no longer funds this center.

# FINAL PRIORITIES:

The Assistant Secretary for Special Education and
Rehabilitative Services announces the following priorities for
the establishment of a Rehabilitation Engineering Research
Center (RERC) on Recreational Technologies and Exercise

Physiology Benefiting Individuals with Disabilities; and an RERC on Rehabilitation Robotics. Within its designated priority research area, each RERC will focus on innovative technological solutions, new knowledge, and concepts that will improve the lives of individuals with disabilities.

Priority 1--RERC on Recreational Technologies and Exercise

Physiology Benefiting Individuals With Disabilities.

Under this priority, the RERC must research, develop, and evaluate innovative technologies and strategies that will enhance recreational and physical activity opportunities for individuals with disabilities. The RERC must research, develop, or adapt technologies to capture, monitor, and analyze energy expenditure levels in individuals with disabilities as they perform different recreational and physical activities, so that clinicians, researchers, and individuals with disabilities can better estimate the intensity and frequency of physical activity required to promote health and function within specific disability populations. In addition, the RERC must facilitate access to, and use of, recreational and physical activity equipment, facilities, and recreational programs, that improve physical health and reduce debilitating secondary conditions associated with disability and sedentary lifestyle through such means as collaboration and communication with relevant stakeholders, technical assistance, and technology transfer, in addition to research and the development and testing of innovations.

### Priority 2--RERC on Rehabilitation Robotics

Under this priority, the RERC must research, develop, and evaluate innovative technologies and strategies for the safe use of, and expanded access to, rehabilitation robotics by individuals with disabilities. This RERC must engage in research and development activities in the areas of both assistance and therapy robots for use by individuals with disabilities. The RERC must generate new knowledge and products that can improve the usability and utility of assistance robots so that they are more efficient and effective facilitators of independence and community participation. The RERC must also generate new knowledge and products that expand the use of therapy robots beyond large rehabilitation centers and into more community and home-based settings.

### Requirements applicable to both priorities:

Under each priority, the RERC must be designed to contribute to the following outcomes:

- (1) Increased technical and scientific knowledge relevant to its designated priority research area. The RERC must contribute to this outcome by conducting high-quality, rigorous research and development projects.
- (2) Increased innovation in technologies, products, environments, performance guidelines, and monitoring and assessment tools applicable to its designated priority research area. The RERC must contribute to this outcome through the development and testing of these innovations.

- (3) Improved research capacity in its designated priority research area. The RERC must contribute to this outcome by collaborating with the relevant industry, professional associations, institutions of higher education, health care providers, or educators, as appropriate.
- environments in the RERC's designated priority research area.

  The RERC must contribute to this outcome by emphasizing the principles of universal design in its product research and development. For purposes of this section, the term "universal design" refers to the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.
- (5) Improved awareness and understanding of cutting-edge developments in technologies within its designated priority research area. The RERC must contribute to this outcome by identifying and communicating with relevant stakeholders, including NIDRR; individuals with disabilities and their representatives; disability organizations; service providers; editors of professional journals; manufacturers; and other interested parties regarding trends and evolving product concepts related to its designated priority research area.
- (6) Increased impact of research in the designated priority research area. The RERC must contribute to this outcome by providing technical assistance to relevant public and private organizations, individuals with disabilities, employers,

and schools on policies, guidelines, and standards related to its designated priority research area.

(7) Increased transfer of RERC-developed technologies to the marketplace. The RERC must contribute to this outcome by developing and implementing a plan for ensuring that all technologies developed by the RERC are made available to the public. The technology transfer plan must be developed in the first year of the project period in consultation with the NIDRR-funded Disability Rehabilitation Research Project, Center on Knowledge Translation for Technology Transfer.

In addition, under each priority, the RERC must--

- Have the capability to design, build, and test prototype devices and assist in the technology transfer and knowledge translation of successful solutions to relevant production and service delivery settings;
- Evaluate the efficacy and safety of its new products, instrumentation, or assistive devices;
- Provide as part of its proposal, and then implement, a
  plan that describes how it will include, as appropriate,
  individuals with disabilities or their representatives in all
  phases of its activities, including research, development,
  training, dissemination, and evaluation;
- Provide as part of its proposal, and then implement, a
  plan to disseminate its research results to individuals with
  disabilities and their representatives; disability
  organizations; service providers; professional journals;

manufacturers; and other interested parties. In meeting this requirement, each RERC may use a variety of mechanisms to disseminate information, including state-of-the-science conferences, webinars, Web sites, and other dissemination methods; and

• Coordinate research projects of mutual interest with relevant NIDRR-funded projects, as identified through consultation with the NIDRR project officer.

# Types of Priorities:

When inviting applications for a competition using one or more priorities, we designate the type of each priority as absolute, competitive preference, or invitational through a notice in the <a href="Federal Register">Federal Register</a>. The effect of each type of priority follows:

Absolute priority: Under an absolute priority, we consider only applications that meet the priority (34 CFR 75.105(c)(3)).

Competitive preference priority: Under a competitive preference priority, we give competitive preference to an application by (1) awarding additional points, depending on the extent to which the application meets the priority (34 CFR 75.105(c)(2)(i)); or (2) selecting an application that meets the priority over an application of comparable merit that does not meet the priority (34 CFR 75.105(c)(2)(ii)).

Invitational priority: Under an invitational priority, we are particularly interested in applications that meet the priority. However, we do not give an application that meets the

priority a preference over other applications (34 CFR 75.105(c)(1)).

This notice does not preclude us from proposing additional priorities, requirements, definitions, or selection criteria, subject to meeting applicable rulemaking requirements.

Note: This notice does <u>not</u> solicit applications. In any year in which we choose to use one or more of these priorities, we invite applications through a notice in the <u>Federal Register</u>. Executive Orders 12866 and 13563:

### Regulatory Impact Analysis

Under Executive Order 12866, the Secretary must determine whether this regulatory action is "significant" and, therefore, subject to the requirements of the Executive order and subject to review by the Office of Management and Budget (OMB). Section 3(f) of Executive Order 12866 defines a "significant regulatory action" as an action likely to result in a rule that may--

- (1) Have an annual effect on the economy of \$100 million or more, or adversely affect a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or Tribal governments or communities in a material way (also referred to as an "economically significant" rule);
- (2) Create serious inconsistency or otherwise interfere with an action taken or planned by another agency;

- (3) Materially alter the budgetary impacts of entitlement grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles stated in the Executive order.

This regulatory action is not a significant regulatory action subject to review by OMB under section 3(f) of Executive Order 12866.

We have also reviewed this regulatory action under Executive Order 13563, which supplements and explicitly reaffirms the principles, structures, and definitions governing regulatory review established in Executive Order 12866. To the extent permitted by law, Executive Order 13563 requires that an agency--

- (1) Propose or adopt regulations only on a reasoned
  determination that their benefits justify their costs
  (recognizing that some benefits and costs are difficult to
  quantify);
- (2) Tailor its regulations to impose the least burden on society, consistent with obtaining regulatory objectives and taking into account—among other things and to the extent practicable—the costs of cumulative regulations;
- (3) In choosing among alternative regulatory approaches, select those approaches that maximize net benefits (including

potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity);

- (4) To the extent feasible, specify performance objectives, rather than the behavior or manner of compliance a regulated entity must adopt; and
- (5) Identify and assess available alternatives to direct regulation, including economic incentives—such as user fees or marketable permits—to encourage the desired behavior, or provide information that enables the public to make choices.

Executive Order 13563 also requires an agency "to use the best available techniques to quantify anticipated present and future benefits and costs as accurately as possible." The Office of Information and Regulatory Affairs of OMB has emphasized that these techniques may include "identifying changing future compliance costs that might result from technological innovation or anticipated behavioral changes."

We are taking this regulatory action only on a reasoned determination that its benefits justify its costs. In choosing among alternative regulatory approaches, we selected those approaches that maximize net benefits. Based on the analysis that follows, the Department believes that these priorities are consistent with the principles in Executive Order 13563.

We also have determined that this regulatory action would not unduly interfere with State, local, and tribal governments in the exercise of their governmental functions. In accordance with both Executive orders, the Department has assessed the potential costs and benefits of this regulatory action. The potential costs associated with this regulatory action are those resulting from statutory requirements and those we have determined as necessary for administering the Department's programs and activities.

The benefits of the Disability and Rehabilitation Research Projects and Centers Programs have been well established over the years in that similar projects have been completed successfully. These priorities will generate new knowledge through research and development. Another benefit of these priorities is that the establishment of new RERCs will improve the lives of individuals with disabilities. The new RERCs will generate, disseminate, and promote the use of new information that will improve the options for individuals with disabilities to fully participate in their communities.

Accessible Format: Individuals with disabilities can obtain this document in an accessible format (e.g., braille, large print, audiotape, or compact disc) on request to the Grants and Contracts Services Team, U.S. Department of Education, 400 Maryland Avenue, SW., room 5075, PCP, Washington, DC 20202-2550. Telephone: (202) 245-7363. If you use a TDD, call the FRS, toll free, at 1-800-877-8339.

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You may also access documents of the Department published in the <u>Federal Register</u> by using the article search feature at: www.federalregister.gov. Specifically, through the advanced search feature at this site, you can limit your search to documents published by the Department.

Dated:

Alexa Posny,
Assistant Secretary for

Special Education and Rehabilitative Services.

# SECTION D BACKGROUND STATEMENT

From the notice of proposed priorities (NPP) for NIDRR's Disability and Rehabilitation Research Projects and Centers Program in the Federal Register on April 10, 2012 (77 FR 21547).

Proposed Priority 1--Recreational Technologies and Exercise Physiology Benefiting Individuals with Disabilities. Background:

Individuals with disabilities engage in physical activity, or movement that enhances health, far less often than individuals without disabilities, despite the consistent evidence indicating the benefits of regular physical activity for their health and well-being (Institute of Medicine, 2007). Environmental barriers, such as inaccessible facilities, equipment, and recreational programs, continue to limit participation in physical and recreational activities among individuals with disabilities. Another factor impeding more engagement in physical activity among this population is limited knowledge about safe and appropriate levels of exercise. New knowledge in this area could be used to guide clinicians, other practitioners, and individuals with disabilities as they make decisions about optimal levels of participation in physical and recreational activities.

While modifications to recreational facilities and equipment, such as the addition of swing-away seats to allow use from a wheelchair or the addition of braille instructions for the equipment, are becoming more common, these modifications are not universally available. Inaccessibility of recreational equipment and environments remains a primary barrier to

participation in physical activities (Kailes, 2011). In addition to modifying existing facilities and equipment, there are novel recreational technologies that need to be tested for use by individuals with disabilities. For example, virtual reality (VR) and body movement tracking video-game technologies offer an emerging and highly promising method for promoting, monitoring, and supporting greater participation in physical activity by individuals with disabilities.

For those individuals with disabilities who do engage in physical activity, there is little evidence about the amount of physical activity and energy expenditure required to promote health and function and prevent secondary conditions (Rimmer, Chen, McCubbin, Drum, Peterson, 2010). The development of new methods and techniques or adaptation of existing technologies that can estimate the intensity and frequency of physical activity (e.g., pedometers, accelerometers, and data-logging technologies) could be an effective means of promoting health and function for specific disability populations (Hiremath & Ding, 2011).

For these reasons, NIDRR seeks to fund research and development activities that will facilitate equitable access to, and safe use of, recreational equipment, facilities, and recreational programs, and that will increase physical health and reduce secondary conditions associated with disability and sedentary lifestyle.

# References:

Hiremath SV, Ding D. (2011). Regression equations for RT3 activity monitors to estimate energy expenditure in manual wheelchair users. Conference Proceedings IEEE Engineering in Medicine and Biology Society. Aug; 2011:7348-51.

Institute of Medicine. (2007). Adequacy of Evidence for Physical Activity Guidelines Development: Workshop summary. Washington, DC: The National Academies Press.

Kailes, J.I. (2011). Using a fitness center does not have to be an exercise in frustration: Tips for people with mobility and visual disabilities. Retrieved January 25, 2012, from <a href="http://www.ncpad.org/programming/fact sheet.php?sheet=812&view=a">http://www.ncpad.org/programming/fact sheet.php?sheet=812&view=a</a> ll&print=yes

Rimmer, J.H., Chen, M.D., McCubbin, J.A., Drum, C.,

Peterson, J. (2010). Exercise intervention research on persons

with disabilities: what we know and where we need to go.

American Journal of Physical Medicine & Rehabilitation. 89(3):

249-63.

Rimmer, J.H., Hsieh, K., Graham, B.C., Gerber, B.S., Gray-Stanley, J.A. (2010). Barrier removal in increasing physical activity levels in obese African American women with disabilities. Journal of Womens Health. 19(10): 1869-76.

# Proposed Priority 2--Rehabilitation Robotics Background:

Individuals working in the field of rehabilitation robotics develop robotic systems that assist persons who have a disability that affects object manipulation, mobility, and cognitive functions, or that provide therapy for persons seeking to improve physical functions (Van der Loos & Reinkensmeyer, 2008). Advances in assistance and therapy robotics can be used to improve outcomes of individuals with disabilities in one or more major life domains identified in NIDRR's currently approved Long Range Plan, published in the <u>Federal Register</u> on February 15, 2006 (71 FR 8165): health and function, community living and participation, and employment.

Assistance robots generally fall into three categories: those that provide assistance with object manipulation, mobility, or cognition. Examples of assistance robots include manipulator arms, wheelchairs with semi-autonomous navigation assistance, and cognitive aids that, for example, respond to sound, light, and contact to facilitate social interaction with children with autism and elderly adults with dementia (Van der Loos & Reinkensmeyer, 2008). There are a number of challenges associated with the design and widespread use of assistance robots for individuals with disabilities. For example, assistance robots typically need to be personalized to meet the specific needs, circumstances, and functional abilities of the individuals with disabilities using them. This need for

individualization places practical limits on the design, marketing, and widespread distribution of these technological solutions. Another challenge is ensuring the safety of individuals who use assistance robots, while maintaining the assistance robots' autonomy and optimal utility to the user (Van der Loos & Reinkensmeyer, 2008).

Although current assistance robots show promise in providing individuals with disabilities greater independence and more choice in rehabilitation therapies, new advances in rehabilitation robotics are needed to optimize their value and utility. For example, robotic manipulator arms can be enhanced to increase the speed and strength of the arm, while monitoring and adjusting the strength of the end component of the robotic arm, known as the end effector or end of arm tool (EOAT). With this enhancement, the manipulated objects are not crushed by the EOAT. Also, electric powered wheelchairs could adopt technologies from mobile robots in order to provide more intuitive operation with less user vigilance and strain. could include integrated sensors for natural obstacle detection and avoidance, docking or securing the wheelchair to a floor, and navigation assistance. In addition, there is a need for more research and development on robotic assistance aids for children and adults with cognitive impairments.

Therapy robots generally aid in rehabilitation therapies for both the upper and lower extremities of individuals with a neurological disability, such as a stroke or spinal cord injury.

Therapy robots can provide therapy over long periods of time, make precise measurements of therapeutic physical interventions to a degree not easily matched in other types of therapies, and provide exercises that a physical therapist cannot (Emken & Reinkensmeyer, 2005; Patton, Phillips-Stoykov, Stojakovich, Mussa-Ivaldi, 2006).

Currently, therapy robots are found only in large medical and rehabilitation centers. There is a need to simplify, downsize, and develop home- and community-based robotic systems to allow safe, low-cost access to such therapy outside of large rehabilitation centers. Therapy robots can help extend the therapist's clinical capacity into the community clinic and the home while allowing greater access to rehabilitation services for individuals with disabilities. For example, therapy robots could be linked to telerehabilitation portals to allow therapists to work remotely with patients in home and community-clinic settings (McCue, Fairman, Pramuka, 2010).

The technology for robotics has made great advances in the last decade. Motors are now lighter and more powerful. Sensors are better and less expensive and batteries are greatly improved. These factors should help to facilitate the continuing growth of rehabilitation robotics, especially for wearable or lighter-weight robots. Accordingly, NIDRR seeks to fund an RERC that evaluates the efficacy of rehabilitation robotics and researches and develops innovative technologies and techniques to improve the current state of the science and

usability of rehabilitation robotics for individuals with disabilities.

#### References:

Emken, J. & Reinkensmeyer, D. (2005). Robot-enhanced motor learning: Accelerating internal model formation during locomotion by transient dynamic amplification, IEEE Transactions on Neural Systems and Rehabilitation Engineering, 99, 1-7.

McCue M, Fairman A, Pramuka M. (2010). Enhancing quality of life through telerehabilitation. Physical Medicine and Rehabilitation Clinics of North America, 21(1): 195-205.

Patton, J.L., Phillips-Stoykov, M.E., Stojakovich, M., Mussa-Ivaldi, F.A. (2006). Evaluation of robotic training forces that either enhance or reduce error in chronic hemiparetic stroke survivors. Experimental Brain Research, 168, 368-383.

Van der Loos, M. & Reinkensmeyer, D.J. (2008).

Rehabilitation and Health Care Robotics. In: Springer Handbook of Robotics. Siciliano, Bruno; Khatib, Oussama (Eds.)

# SECTION E GENERAL REQUIREMENTS of RERC's

# Rehabilitation Engineering Research Centers (RERCs)

# General Requirements of RERC program

RERCs carry out research or demonstration activities in support of the Rehabilitation Act of 1973, as amended, by--

 Developing and disseminating innovative methods of applying advanced technology, scientific achievement, and psychological and social knowledge to: (a) solve rehabilitation problems and remove environmental barriers; and (b) study and evaluate new or emerging technologies, products, or environments and their effectiveness and benefits; or

Demonstrating and disseminating: (a) innovative models for the delivery of costeffective rehabilitation technology services to rural and urban areas; and (b) other scientific research to assist in meeting the employment and independent living needs of individuals with severe disabilities; and

 Facilitating service delivery systems change through: (a) the development, evaluation, and dissemination of innovative consumer-responsive and individual- and family-centered models for the delivery to both rural and urban areas of innovative, costeffective rehabilitation technology services; and (b) other scientific research to assist in meeting the employment and independence needs of individuals with severe disabilities.

Each RERC must be operated by, or in collaboration with, one or more institutions of higher education or one or more nonprofit organizations.

Each RERC must provide training opportunities, in conjunction with institutions of higher education or nonprofit organizations, to assist individuals, including individuals with disabilities, to become rehabilitation technology researchers and practitioners.

Each RERC must emphasize the principles of universal design in its product research and development. Universal design is "the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design" (North Carolina State University, 1997. http://www.design.ncsu.edu/cud/about\_ud/udprinciplestext.htm).

Additional information on the RERCs can be found at: http://www.ed.gov/rschstat/research/pubs/index.html.

# SECTION F SELECTION CRITERIA

# **SELECTION CRITERIA**

We use the following selection criteria to evaluate applications under RERC program. The maximum score for all of these criteria is 100 points. The maximum score for each criterion is indicated in parentheses.

# (a) Importance of the problem (10 points total)

- (1) The Secretary considers the importance of the problem.
- (2) In determining the importance of the problem, the Secretary considers the extent to which the applicant clearly describes the need and target population.

# (b) Design of research activities (25 points total).

- (1) The Secretary considers the extent to which the design of research activities is likely to be effective in accomplishing the objectives of the project.
- (2) In determining the quality of research activities, the Secretary considers the extent to which the methodology of each proposed research activity is meritorious, including consideration of the extent to which--
- (A) The proposed design includes a comprehensive and informed review of the current literature, demonstrating knowledge of the state-of-the-art;
- (B) Each research hypothesis is theoretically sound and based on current knowledge;
  - (C) Each sample population is appropriate and of sufficient size;
- (D) The data collection and measurement techniques are appropriate and likely to be effective; and
  - (E) The data analysis methods are appropriate.

# (c) <u>Design of development activities</u> (25 points total).

- (1) The Secretary considers the extent to which the design of development activities is likely to be effective in accomplishing the objectives of the project.
- (2) In determining the quality of development activities, the Secretary considers the extent to which the plan for development, clinical testing, and evaluation of new devices and technology is likely to yield significant products or techniques, including consideration of the extent to which-
- (A) The proposed project will use the most effective and appropriate technology available in developing the new device or technique;
- (B) The proposed development is based on a sound conceptual model that demonstrates an awareness of the state-of-the-art in technology;
- (C) The new device or technique will be developed and tested in an appropriate environment;
  - (D) The new device or technique is likely to be cost-effective and useful;
- (E) The new device or technique has the potential for commercial or private manufacture, marketing, and distribution of the product; and
- (F) The proposed development efforts include adequate quality controls and, as appropriate, repeated testing of products.

# (d) Design of training activities (5 points total)

- (1) The Secretary considers the extent to which the design of training activities is likely to be effective in accomplishing the objectives of the project.
- (2) In determining the quality of training activities, the Secretary considers the extent to which the type, extent, and quality of the proposed clinical and laboratory research experience, including the opportunity to participate in advanced-level research, are likely to develop highly qualified researchers.

# (e) <u>Design of dissemination activities</u> (5 points total)

- (1) The Secretary considers the extent to which the design of dissemination activities is likely to be effective in accomplishing the objectives of the project.
- (2) In determining the quality of dissemination activities, the Secretary considers the extent to which the materials to be disseminated are likely to be effective and usable, including consideration of their quality, clarity, variety, and format.

# (f) Plan of operation. (5 points total)

- (1) The Secretary considers the quality of the plan of operation.
- (2) In determining the quality of the plan of operation, the Secretary considers the adequacy of the plan of operation to achieve the objectives of the proposed project on time and within budget, including clearly defined responsibilities, and timelines for accomplishing project tasks.

# (g) Adequacy and reasonableness of the budget (4 points total)

- (1) The Secretary considers the adequacy and the reasonableness of the proposed budget.
- (2) In determining the adequacy and the reasonableness of the proposed budget, the Secretary considers the extent to which the budget for the project, including any subcontracts, is adequately justified to support the proposed project activities.

# (h) Plan of evaluation (8 points total).

- (1) The Secretary considers the quality of the plan of evaluation.
- (2) In determining the quality of the plan of evaluation, the Secretary considers the extent to which the plan of evaluation will be used to improve the performance of the project through the feedback generated by its periodic assessments.

# (i) Project staff (8 points total).

- (1) The Secretary considers the quality of the project staff.
- (2) In determining the quality of the project staff, the Secretary considers the extent to which the applicant encourages applications for employment from persons who are members of groups that have traditionally been underrepresented based on race, color, national origin, gender, age, or disability.
  - (3) In addition, the Secretary considers the following factors:
- (i) The extent to which the key personnel and other key staff have appropriate training and experience in disciplines required to conduct all proposed activities;
- (ii) The extent to which the commitment of staff time is adequate to accomplish all the proposed activities of the project.

# (j) Adequacy and accessibility of resources (5 points total).

- (1) The Secretary considers the adequacy and accessibility of the applicant's resources to implement the proposed project.
  - (2) In determining the adequacy and accessibility of resources, the Secretary considers the following factors:
- (i) The extent to which the applicant is committed to provide adequate facilities, equipment, other resources, including administrative support, and laboratories, if appropriate;
- (ii) The extent to which the facilities, equipment, and other resources are appropriately accessible to individuals with disabilities who may use the facilities, equipment, and other resources of the project.

# SECTION G PROTECTION OF HUMAN SUBJECTS

# **Protection of Human Subjects**

Research activities involving human subjects supported by awards under these programs are subject to Department of Education Regulations for the Protection of Human Subjects. You do **not** need an assurance or IRB approval as a condition of applying for this competition.

If you marked "Yes" for Item 3 of Department of Education Supplemental Information for SF 424, you must provide a human subjects "exempt research" or "nonexempt research" narrative. Insert the narrative(s) in the space provided. If you have multiple projects and need to provide more than one narrative, please indicate which project each set of responses addresses.

**A. Exempt Research Narrative.** If you marked "Yes" for item 3 a. and designated exemption numbers(s), provide the "exempt research" narrative. The narrative must contain sufficient information about the involvement of human subjects in the proposed research to allow a determination by ED that the designated exemption(s) are appropriate. The narrative must be succinct. In addition, narratives are required for each participating partner if research is being conducted at other sites.

**B. Nonexempt Research Narrative.** If you marked "No" for item 3 a. you must provide the "nonexempt research" narrative. The narrative must address the seven points. Although no specific page limitation applies to this section of the application, be succinct.

Copies of the Department of Education regulations for the Protection of Human Subjects as well as other documents are available on the website below. For more information call (202) 260-3353 or go on-line the Protection of Human Subjects in research Web Site:

http://www.ed.gov/about/offices/list/ocfo/humansub.html

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# SECTION H APPLICATION FORMAT AND INSTRUCTIONS

# <u>APPLICATION FORMAT AND INSTRUCTIONS</u>

Applications for grants under this program must be submitted electronically using the Grants.gov Apply site (grants.gov) by the closing date unless you qualify for an exception to this requirement

It is recommended that your electronic application (or paper application if you have requested and been approved for a waiver), be organized in the following manner and include the following:

**NOTE**: You will be uploading sections of your application by heading. There is a heading for:(1) Application for Federal Assistance (SF 424); (2) Table of Contents; (3) Abstract; (4) ED Budget Information Non-Construction Programs (ED-524); (5) Budget Narrative; (6) Project Narrative; (7) General Education Provisions Act (GEPA) Requirements – Section 427; (8) GG Lobbying Form (90-0013); (9) Faith Based Survey on EEO; (10) ED Supplemental Form for SF 424; (11) SF LLL Disclosure of Lobbying; and (12) Vitae/Bibliography/Letters of Support . There is a file size limitation to each section and you may only upload one document under each heading. Therefore, in order to make sure that all of your materials are uploaded successfully, you will need to combine multiple original documents for a heading (e.g., letters, resumes) into a single document before uploading.

# 1. Application for Federal Assistance (Form SF 424)

- This from requires basic identifying information about the applicant and the application.
- Applicants should note that if there are multiple RERCs open to use the RELEVANT CFDA and Title from the NFP/NIA as the title.

# 2. Table of Contents

- The Table of Contents shows where and how the important sections of your proposal are organized.
- While the application will be submitted electronically, the reviewers will use printed copies during the review process. The Table of Contents will assist them in more efficiently and effectively evaluating your application.
- Upload the Table of Contents to Optional Forms: Other Attachments.

### 3. Abstract

- The ONE-PAGE abstract should be a comprehensive description of what the whole (all years) project is, not a description of the competency of the institution or project director. It is not an executive summary. It can be single or double-spaced.
- Upload the Abstract to ED Abstract.

# 4. ED Budget Information Non-Construction Programs (ED-524)

- Remember that you must provide complete budget information for each year of the proposed project. Use the Budget Narrative heading to upload.
- Please report Federal Funds in Section A Budget Summary and Non-Federal Funds Section B – Budget Summary.

 Specific instructions for completing the budget forms are provided within this application package.

Name: Enter the Name of the applicant organization(s) or institution(s) in the space provided.

<u>Personnel (Line 1):</u> Enter project personnel salaries and wages only. Include fees and expenses for consultants on line 6.

<u>Fringe Benefits (Line 2):</u> The institution's normal fringe benefits contribution may be charged to the program. Leave this line blank if fringe benefits applicable to direct salaries and wages are treated as part of the indirect cost.

<u>Travel (Line 3):</u> Indicate the travel costs of employees and participants only. Include travel of persons such as consultants and trainees on line 6.

Equipment (Line 4): Indicate the cost of tangible, non-expendable personal property that has usefulness greater than one year and acquisition costs that are the lesser of the capitalization level established by the applicant entity for financial statement purposes or \$5,000 per article. Lower limits may be established to maintain consistency with the applicant's policy.

<u>Supplies (line 5):</u> Show all tangible personal property except that on line 4.

<u>Contractual (line 6):</u> The contractual category should include all costs specifically incurred with actions that the applicant takes in conjunction with an established internal procurement system. Include consultant fees, expenses, and travel costs in this category if the consultant's services are obtained through a written binding agreement or contract.

Construction (line 7): Not applicable.

Other (line 8): Indicate all direct costs not covered on lines 1-6. For example, include costs such as space rental, required fees, honoraria and travel (where a contract in not in place for services), stipends, training, and communication and printing costs.

Total Direct Costs (line 9): The sum of lines 1-8.

<u>Indirect Costs (line 10):</u> There is no restricted indirect cost rate for this program. Use your institution's federally negotiated rate.

<u>Training Stipends (line 11):</u> There are three types of projects that might include budget requests for stipends, tuition allowance, or other types of similar charges to support the objectives of the project:

Fellowship or Scholarship Programs
Educational Training Projects
Projects where students receive tuition remission or other forms of
compensation, as, or in lieu of wages.

<u>Total Cost (line 12)</u>: This should equal to sum of lines 9-11 (total direct costs + indirect + stipends). The sum for column one, labeled *Project Year 1* (a), should also be equal to item 18a on the application cover sheet (SF Form 424).

<u>Cost Share:</u> If you are providing voluntary cost share. <u>Please include this information on the ED Form 524, Section B – Budget Summary, Non-Federal Funds – Tab 2 and in your budget narrative.</u>

# 5. **Budget Narrative**

- This part requires an itemized budget breakdown for the project year and the basis for estimating the costs of personnel salaries, benefits, project staff travel, materials and supplies, consultants and subcontracts, indirect costs and any other projected expenditures.
- Address Cost Share in a separate section of the budget narrative labeled "Cost Share".
- Please provide an itemized budget breakdown for each project year.
- Upload the Budget Narrative to the Budget Narrative Section.

## 6. Project Narrative

- The application narrative responds to the General Requirements of RRTC's found in Section E and the Selection Criteria found in Section F of this application package. The reviewers will use this section to evaluate your application.
- Upload the Project Narrative to the Project Narrative Section.

Each applicant is <u>encouraged to limit</u> the project narrative to the equivalent of no more than 100 pages, using the following standards:

- A "page" is 8.5" x 11", on one side only, with 1" margins at the top, bottom, and both sides.
- Double-space (no more than three lines per vertical inch) all text in the application narrative, including titles, headings, footnotes, quotations, references, and captions, as well as all text in charts, tables, figures, and graphs
- Use a font that is either 12 point or larger or no smaller than 10 pitch (characters per inch).
- Use one of the following fonts: Times New Roman, Courier, Courier New or Arial.
- Include all critical information in the program narrative, minimizing the need for additional appendices. Ensure that you attach <u>PDF files only</u> for any attachments to your application. PDF files are the only Education approved file type accepted as detailed in the Federal Register application notice. Applicants must submit individual .PDF files only when attaching files to their application. Specifically, the Department will not accept any attachments that contain files within a file, such as PDF Portfolio files. Any attachments uploaded that are not .PDF files or are password protected files will not be read. If you need assistance converting your files to a .pdf format, please refer to this Grants.gov webpage with links to

conversion programs:

http://www.grants.gov/help/download\_software.jsp#pdf\_conversion\_programs

**NOTE:** The recommended page limit does not apply to the Application for Federal Assistance (SF 424); the budget narrative, the forms; the one page abstract, the resumes; the bibliography; or the letters of support. However, the recommended page limit does apply to all of the project narrative section.

### 7. General Education Provisions Act (GEPA) Requirements – Section 427

 Section 427 requires each applicant for funds (other than an individual person) to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its Federally-assisted program for students, teachers, and other program beneficiaries with special needs.

# 8. **GG Lobbying Form (90-0013)**

Instructions for completing this form are included on the Grants.gov website.

## 9. Faith Based Survey on EEO

Instructions for completing this form are included on the Grants.gov website.

# 10. ED Supplemental Form for SF 424

 Instructions for completing this form are included on the Grants.gov website.

#### 11. SF LLL Disclosure of Lobbying

Instructions for completing this form are included on the Grants.gov website.

### 12. Vitae/Bibliography/Letters of Support

- Vitae of staff or consultants should include the individual's title and role in the proposed project, and other information that is specifically pertinent to this proposed project If collaboration with another organization is involved in the proposed activity, the application should include assurances of participation by the other parties, including written agreements or assurances of cooperation.
- Upload the Vitae/Bibliography/Letters of Support to the Other Attachments- Optional Section.

# **SECTION I**

# FREQUENTLY ASKED QUESTIONS AND DUNS NUMBER INSTRUCTIONS

# FREQUENTLY ASKED QUESTIONS

#### 1. CAN I GET AN EXTENSION OF THE DUE DATE?

In the case of most competitions the answer is no. On rare occasions the Department of Education may extend a closing date for all applicants. If that occurs, a notice of the revised due date is published in the <u>Federal Register</u>, this extension will identify who is eligible to apply for a given competition. There are no extensions or exceptions to the due date made for individual applicants. Additionally, there are provisions for extension for Grants.gov, per the guidance included in the application package.

#### 2. WHAT SHOULD BE INCLUDED IN THE APPLICATION?

The application should include the following: (1) Application for Federal Assistance (SF 424); (2) Table of Contents; (3) Abstract; (4) ED Budget Information Non-Construction Programs (ED-524); (5) Budget Narrative; (6) Project Narrative; (7) General Education Provisions Act (GEPA) Requirements – Section 427; (8) GG Lobbying Form (90-0013); (9) Faith Based Survey on EEO; (10) ED Supplemental Form for SF 424; (11) SF LLL Disclosure of Lobbying; and (12) Vitae/Bibliography/Letters of Support. The budgets for all years, including a detailed budget narrative, should be included. If collaboration with another organization or individual is involved in any proposed activity, the application should include assurances of participation by the other parties, including written agreements or letters of cooperation. It is not useful to include general letters of support or endorsement in the application. If the applicant proposes to use unique tests or other measurement instruments that are not widely known in the field, it would be helpful to include the instrument in the application. Many applications contain voluminous appendices that are not helpful and in many cases cannot even be mailed to the reviewers. It is generally not helpful to include such things as brochures, general capability statements of collaborating organizations, maps, copies of publications, or descriptions of other projects completed by the applicant.

### 3. WHAT FORMAT SHOULD BE USED FOR THE APPLICATION?

NIDRR generally advises applicants to organize the project narrative to follow the selection criteria. The project narrative should address the specific selection criteria for the competition. The specific review criteria vary according to the specific programs and are included in this application package. Additionally, applicants should provide clearly stated hypotheses or research questions, goals, objectives, expected outcomes, and public benefit of the research or development project. The application should be organized to provide a thorough description of the methods and target population(s) and supported by evidence of need for the project, as identified in the relevant literature; citations are useful and may strengthen the proposal. Specific information on the format can be found in Section H – Application Format and Instructions of this application package.

#### 4. ARE THERE PAGE LIMITS TO MY APPLICATION?

The application narrative is where you, the applicant, address the selection criteria that reviewers use to evaluate your application. We recommend that you limit the application narrative to the equivalent of no more than 100 pages, using the following standards: (1) A "page" is 8.5" x 11", on one side only, with 1" margins at the top,

bottom, and both sides; (2) Double-space (no more than three lines per vertical inch) all text in the application narrative, including titles, headings, footnotes, quotations, references, and captions, as well as all text in charts, tables, figures, and graphs; (3) Use a font that is either 12 point or larger or no smaller than 10 pitch (characters per inch); (4) Use one of the following fonts: Times New Roman, Courier, Courier New or Arial; and (5) Include all critical information in the program narrative, minimizing the need for additional appendices.

# 5. MAY I SUBMIT APPLICATIONS TO MORE THAN ONE OPEN NIDRR PROGRAM COMPETITION AT A TIME OR MORE THAN ONE APPLICATION TO A PARTICULAR PROGRAM COMPETITION?

Yes. You may submit more than one application in any given competition. You may submit to as many open competitions, for which an application is responsive to the program requirements. However, each competition is unique and the selection criteria will vary from one competition to another. It is important that each separate application include the required materials for that particular competition.

### 6. DO I NEED AN ABSTRACT AND WHAT SHOULD IT INCLUDE?

Yes. The abstract is used by both the peer reviewers and the program staff in the review and processing of the application. The ONE-PAGE abstract should be a comprehensive description of the project (all years), not a description of the competency of the institution or project director. It is not an executive summary. It can be single or double-spaced. Upload the Abstract to ED Abstract.

### 7. WHAT IS THE ALLOWABLE INDIRECT COST RATE?

For the Rehabilitation Engineering Research Centers (133E) applicants must have a current indirect cost rate agreement to charge indirect costs to a grant. The maximum amount of the award includes both direct and indirect costs (ED Budget Information non-Construction programs (ED-524). The Department's Indirect Cost Group has more information on what you should know about indirect cost rates on its Web site, http://www2.ed.gov/about/offices/list/ocfo/fipao/abouticg.html

### 8. CAN PROFIT MAKING BUSINESSES APPLY FOR GRANTS?

Yes; however, for-profit organizations will not be able to collect a fee or profit on the grant.

### 9. CAN INDIVIDUALS APPLY FOR GRANTS?

Individuals are not eligible to apply for the Rehabilitation Engineering Research Centers Program.

# 10. CAN NIDRR STAFF ADVISE ME WHETHER MY PROJECT IS OF INTEREST TO NIDRR OR LIKELY TO BE FUNDED?

No. NIDRR staff can only advise you of the requirements of the program in which you propose to submit your application. However, staff cannot advise you as to whether or not your subject area or proposed approach is likely to receive approval.

## 11. HOW DO I ENSURE THAT MY APPLICATION WILL BE REVIEWED UNDER THE CORRECT COMPETITION?

Applicants must clearly include the competition title and CFDA number on the Standard Form 424, and include a project title that describes the project, based on the competition.

## 12. HOW SOON AFTER SUBMITTING MY APPLICATION CAN I FIND OUT IF IT WILL BE FUNDED?

The time from closing date to grant award date varies from program to program. Generally speaking, NIDRR makes awards within six to seven months after the closing date. Unsuccessful applicants generally will be notified within that time frame as well. When NIDRR is able to release information on the status of grant applications, it will notify applicants by letter. This information is **not** posted on the NIDRR homepage or Grants.gov.

### 13. WHAT START DATE SHOULD I USE ON MY APPLICATION?

For the purpose of estimating a project start date, the applicant should estimate approximately six to seven months from the closing date, preferably October 1. You must have a start date that allows you to complete an Annual Performance Report (APR) by May 31<sup>st</sup> with a minimum of six month of activities to report on.

### 14. IF MY APPLICATION IS SUCCESSFUL, CAN I ASSUME I WILL GET THE REQUESTED BUDGET AMOUNT IN SUBSEQUENT YEARS?

No. Funding in subsequent years is subject to availability of funds and project performance.

### 15. WILL ALL APPROVED APPLICATIONS BE FUNDED?

No. Peer review can result in more applications being determined to be worthy of consideration for funding than available resources allow. Unsuccessful applicants are encouraged to consider resubmitting applications in future competitions. Funded applications will be notified in the manner described in #12.

### 16. DO I HAVE TO INCLUDE COST SHARE IN MY APPLICATION?

Cost share is not required for this program. If you choose to share costs, include the information on the SF 424, ED 524, and the budget narrative.

# 17. WHAT DO I NEED TO DO ABOUT HUMAN SUBJECTS PROTECTION IN MY RESEARCH?

If you are planning research involving human subjects at any time during the project period, you check "Yes" in the Human Subjects section of the ED supplement to the SF 424 form. If you checked "Yes," you need to indicate whether the research is exempt or

not exempt from the protection of human subjects requirements of EDGAR part 97 and if you have an IRB number. You will need to fill out the human subjects narrative for each site where the research is being conducted. The program and the Department's human subjects staff review the applicant's response against the application itself to determine its accuracy. They contact you for additional information or clarification, if needed. More information can be found in the instructions for the SF 424 form and in this application package in the Human Subjects section.

### 18. MUST I SUBMIT MY APPLICATION VIA GRANTS.GOV?

Applications for grants for this competition must be submitted electronically using the Governmentwide Grants.gov Apply site at <a href="www.Grants.gov">www.Grants.gov</a>. Through this site, you will be able to download a copy of the application package, complete it offline, and then upload and submit your application. You may not e-mail an electronic copy of a grant application to us. We will reject your application if you submit it in paper format unless you qualify for one of the exceptions to the electronic submission requirement and submit, no later than two weeks before the application deadline date, a written statement to the Department that you qualify for one of these exceptions.

## 19. HOW WILL I RECEIVE FUNDING FOR THE ADDITIONAL YEARS OF MY GRANT (CONTINUATION AWARD)?

In making a continuation award, the Secretary may consider under 34 CFR 75.253, the extent to which a grantee has made "substantial progress toward meeting the objectives in its approved application." This consideration includes the review of a grantee's progress in meeting the targets and projected outcomes in its approved application, and whether the grantee has expended funds in a manner that is consistent with its approved application and budget. In making a continuation grant, the Secretary also considers whether the grantee is operating in compliance with the assurances in its approved application, including those applicable to Federal civil rights laws that prohibit discrimination in programs or activities receiving Federal financial assistance from the Department (34 CFR 100.4, 104.5, 106.4, 108.8, and 110.23)

### **DUNS NUMBER INSTRUCTIONS**

NOTE: Check with your fiscal office to see if your institution has an assigned DUN before contacting Dun & Bradstreet

D-U-N-S No.: Please provide the applicant's D-U-N-S Number. You can obtain your D-U-N-S Number at no charge by calling **1-800-234-3867** or by completing a D-U-N-S Number Request Form. The form can be obtained via the Internet at the following URL:

http://www.dnb.com/US/duns\_update/index.html

The D-U-N-S Number is a unique nine-digit number that does not convey any information about the recipient. A built in check digit helps assure the accuracy of the D-U-N-S Number. The ninth digit of each number is the check digit, which is mathematically related to the other digits. It lets computer systems determine if a D-U-N-S Number has been entered correctly.

Dun & Bradstreet, a global information services provider, has assigned D-U-N-S numbers to over 43 million companies worldwide. **Live help Monday-Friday 8am-6pm (EST) Dial 1.800.234.3867** 

Note: Electronic submission via Grants.gov must use DUNS number your organization used when it registered in the Central Contractor Registry.

### **SECTION J**

# GRANTS.GOV SUBMISSION PROCEDURES AND TIPS FOR APPLICANTS AND APPLICATION TRANSMITTAL INSTRUCTIONS

### IMPORTANT – PLEASE READ FIRST

# U.S. Department of Education Grants.gov Submission Procedures and Tips for Applicants

To facilitate your use of Grants.gov, this document includes important submission procedures you need to be aware of to ensure your application is received in a timely manner and accepted by the Department of Education.

### ATTENTION - Adobe Forms and PDF Files Required

Applications submitted to Grants.gov for the Department of Education will be posted using Adobe forms. Therefore, applicants will need to download the latest version of Adobe reader (at least Adobe Reader 8.1.2). Information on computer and operating system compatibility with Adobe and links to download the latest version is available on Grants.gov. We strongly recommend that you review these details on <a href="www.Grants.gov">www.Grants.gov</a> before completing and submitting your application. In addition, applicants should submit their application a day or two in advance of the closing date as detailed below. Also, applicants are required to upload their attachments in .pdf format only. (See details below under "Attaching Files – Additional Tips.") If you have any questions regarding this matter please email the Grants.gov Contact Center at <a href="support@grants.gov">support@grants.gov</a> or call 1-800-518-4726.

Also, applicants should be aware that on October 11, 2010, Grants.gov implemented a new security build which requires each organization's e-Biz POC (Point of Contact) update their Grants.gov registration. To complete this step, the e-Biz POC must have their DUNS number and CCR MPIN. We recommend this step be completed several days before application submission unless the e-Biz POC has already responded to this requirement. For more information on this topic, please visit this Grants.gov information link: <a href="http://www.grants.gov/securitycommebiz/">http://www.grants.gov/securitycommebiz/</a>.

- 1) **REGISTER EARLY** Grants.gov registration may take five or more business days to complete. You may begin working on your application while completing the registration process, but you cannot submit an application until all of the Registration steps are complete. For detailed information on the Registration Steps, please go to:

  <a href="http://www.grants.gov/applicants/get\_registered.jsp">http://www.grants.gov/applicants/get\_registered.jsp</a>. [Note: Your organization will need to update its Central Contractor Registry (CCR) registration annually.]
- 2) SUBMIT EARLY We strongly recommend that you do not wait until the last day to submit your application. Grants.gov will put a date/time stamp on your application and then process it after it is fully uploaded. The time it takes to upload an application will vary depending on a number of factors including the size of the application and the speed of your Internet connection, and the time it takes Grants.gov to process the application will vary as well. If Grants.gov rejects your application (see step three below), you will need to resubmit successfully before 4:30:00 p.m. Washington, DC time on the deadline date.

Note: To submit successfully, you must provide the DUNS number on your application that was used when you registered as an Authorized Organization Representative (AOR) on Grants.gov. This DUNS number is typically the same number used when your organization registered with the CCR (Central Contractor Registry). If you do not enter the same DUNS number on your application as the DUNS you registered with, Grants.gov will reject your application.

3) **VERIFY SUBMISSION IS OK** – You will want to verify that Grants.gov and the Department of Education receive your Grants.gov submission timely and that it was validated successfully. To see the date/time your application was received, login to Grants.gov and click on the Track My Application link. For a successful submission, the date/time received should be earlier than 4:30:00 p.m. Washington, DC time, on the deadline date, AND the application status should be: Validated, Received by Agency, or Agency Tracking Number Assigned.

If the date/time received is later than 4:30:00 p.m. Washington, D.C. time, on the deadline date, your application is late. If your application has a status of "Received" it is still awaiting validation by Grants.gov. Once validation is complete, the status will either change to "Validated" or "Rejected with Errors." If the status is "Rejected with Errors," your application has not been received successfully. Some of the reasons Grants.gov may reject an application can be found on the Grants.gov site: <a href="http://www.grants.gov/applicants/applicant\_faqs.jsp#54">http://www.grants.gov/applicants/applicant\_faqs.jsp#54</a>. For more detailed information on

troubleshooting Adobe errors, you can review the Adobe Reader Error Messages document at <a href="http://www.grants.gov/assets/AdobeReaderErrorMessages.pdf">http://www.grants.gov/assets/AdobeReaderErrorMessages.pdf</a>. If you discover your application is late or has been rejected, please see the instructions below. Note: You will receive a series of confirmations both online and via e-mail about the status of your application. Please do not rely solely on e-mail to confirm whether your application has been received timely and validated successfully.

### Submission Problems - What should you do?

If you have problems submitting to Grants.gov before the closing date, please contact Grants.gov Customer Support at 1-800-518-4726 or <a href="http://www.grants.gov/contactus/contactus.jsp">http://www.grants.gov/contactus.jsp</a>, or use the customer support available on the Web site: <a href="http://www.grants.gov/applicants/applicant\_help.jsp">http://www.grants.gov/applicants/applicant\_help.jsp</a>.

If electronic submission is <u>optional</u> and you have problems that you are unable to resolve before the deadline date and time for electronic applications, please follow the transmittal instructions for hard copy applications in the Federal Register notice and get a hard copy application postmarked by midnight on the deadline date.

If electronic submission is <u>required</u>, you must submit an electronic application before 4:30:00 p.m., unless you follow the procedures in the Federal Register notice and qualify for one of the exceptions to the electronic submission requirement <u>and</u> submit, no later than two weeks before the application deadline date, a written statement to the Department that you qualify for one of these exceptions. (See the Federal Register notice for detailed instructions.)

### Helpful Hints When Working with Grants.gov

Please note, once you download an application from Grants.gov, you will be working offline and saving data on your computer. Please be sure to note where you are saving the Grants.gov file on your computer. You will need to logon to Grants.gov to upload and submit the application. You must provide the DUNS number on your application that was used when you registered as an Authorized Organization Representative (AOR) on Grants.gov.

Please go to <a href="http://www.grants.gov/applicants/applicant\_help.jsp">http://www.grants.gov/applicants/applicant\_help.jsp</a> for help with Grants.gov. For additional tips related to submitting grant applications, please refer to the Grants.gov Submit Application FAQs found on the Grants.gov

<a href="http://www.grants.gov/help/submit\_application\_faqs.jsp">http://www.grants.gov/help/submit\_application\_faqs.jsp</a>.

#### **Dial-Up Internet Connections**

When using a dial up connection to upload and submit your application, it can take significantly longer than when you are connected to the Internet with a high-speed connection, e.g. cable modem/DSL/T1. While times will vary depending upon the size of your application, it can take a few minutes to a few hours to complete your grant submission using a dial up connection. If you do not have access to a high-speed connection and electronic submission is required, you may want to consider following the instructions in the Federal Register notice to obtain an exception to the electronic submission requirement no later than two weeks before the application deadline date. (See the Federal Register notice for detailed instructions.)

#### **MAC Users**

For MAC compatibility information, review the Operating System Platform Compatibility Table at the following Grants.gov link: <a href="http://www.grants.gov/help/download\_software.jsp">http://www.grants.gov/help/download\_software.jsp</a>. If electronic submission is required and you are concerned about your ability to submit electronically as a non-windows user, please follow instructions in the Federal Register notice to obtain an exception to the electronic submission requirement no later than two weeks before the application deadline date. (See the Federal Register notice for detailed instructions.)

Please note the following tips related to attaching files to your application, especially the requirement that applicants **only include .pdf files** in their application:

- 1. Ensure that you attach <u>.PDF files only</u> for any attachments to your application. PDF files are the only Education approved file type accepted as detailed in the Federal Register application notice. Applicants must submit individual .PDF files only when attaching files to their application. Specifically, the Department will not accept any attachments that contain files within a file, such as PDF Portfolio files. Any attachments uploaded that are not .PDF files or are password protected files will not be read. If you need assistance converting your files to a .pdf format, please refer to this Grants.gov webpage with links to conversion programs: <a href="http://www.grants.gov/help/download\_software.jsp#pdf\_conversion\_programs">http://www.grants.gov/help/download\_software.jsp#pdf\_conversion\_programs</a>
- 2. Grants.gov cannot process an application that includes two or more files that have the same name within a grant submission. Therefore, each file uploaded to your application package should have a unique file name.
- 3. When attaching files, applicants should follow the guidelines established by Grants.gov on the size and content of file names. Uploaded files must be less than 50 characters, contain no spaces, no special characters (example: -, &, \*, %, /, #, \) including periods (.), blank spaces and accent marks. Applications submitted that do not comply with the Grants.gov guidelines will be rejected at Grants.gov and not forwarded to the Department.
- 4. Applicants should limit the size of their file attachments. Documents submitted that contain graphics and/or scanned material often greatly increase the size of the file attachments and can result in difficulties opening the files. For reference, the average discretionary grant application package totals 1 to 2 MB. Therefore, you may want to check the total size of your package before submission.

2/2011

# APPLICATION TRANSMITTAL INSTRUCTIONS FOR MAIL OR HAND DELIVERY IF A WAIVER HAS BEEN OBTAINED

### Submission of Paper Applications by Mail.

If you submit your application in paper format by mail (through the U.S. Postal Service or a commercial carrier), you must mail the original and two copies of your application, on or before the application deadline date, to the Department at the following address:

### By mail through the U.S. Postal Service:

U.S. Department of Education Application Control Center Attention: (CFDA number 84.133E-1 and 84.133E-3) LBJ Basement Level 1 400 Maryland Avenue, SW. Washington, DC 20202-4260

Regardless of which address you use, you must show proof of mailing consisting of one of the following:

- (1) A legibly dated U.S. Postal Service postmark.
- (2) A legible mail receipt with the date of mailing stamped by the U.S. Postal Service.
  - (3) A dated shipping label, invoice, or receipt from a commercial carrier.
- (4) Any other proof of mailing acceptable to the Secretary of the U.S. Department of Education.

If you mail your application through the U.S. Postal Service, we do not accept either of the following as proof of mailing:

- (1) A private metered postmark.
- (2) A mail receipt that is not dated by the U.S. Postal Service.

If your application is postmarked after the application deadline date, we will not consider your application.

<u>Note</u>: The U.S. Postal Service does not uniformly provide a dated postmark. Before relying on this method, you should check with your local post office.

### c. <u>Submission of Paper Applications by Hand Delivery</u>.

If you qualify for an exception to the electronic submission requirement, you (or a courier service) may deliver your paper application to the Department by hand. You

must deliver the original and two copies of your application by hand, on or before the application deadline date, to the Department at the following address:

U.S. Department of Education Application Control Center Attention: (CFDA Number 84.133E-1 and 84.133E-3) 550 12th Street, SW. Room 7041, Potomac Center Plaza Washington, DC 20202-4260

The Application Control Center accepts hand deliveries daily between 8:00 a.m. and 4:30 p.m., Washington, DC time, except Saturdays, Sundays, and Federal holidays.

Note for Mail or Hand Delivery of Paper Applications: If you mail or hand deliver your application to the Department--

- (1) You must indicate on the envelope and--if not provided by the Department--in Item 11 of the SF 424 the CFDA number, including suffix letter, if any, of the competition under which you are submitting your application; and
- (2) The Application Control Center will mail to you a notification of receipt of your grant application. If you do not receive this notification within 15 business days from the application deadline date, you should call the U.S. Department of Education Application Control Center at (202) 245-6288.

# SECTION K REQUIRED FORMS AND FORM INSTRUCTIONS

### **REQUIRED FORMS**

All electronic and paper (if a waiver has been submitted and approved) applications submitted to NIDRR must include the following forms/parts:

- Application for Federal Assistance (SF 424)
- Table of Contents
- Abstract
- ED Budget Information Non-Construction Programs (ED-524)
- Budget Narrative
- Project Narrative
- General Education Provisions Act (GEPA) Requirements Section 427
- GG Lobbying Form (90-0013)
- Faith Based Survey on EEO
- ED Supplemental Form for SF 424
- SF LLL Disclosure of Lobbying
- Vitae/Bibliography/Letters of Support

A separate application must be submitted for each grant sought. No grant may be awarded unless the completed application forms have been received. All above forms are mandatory and must be submitted with the application. If an item does not appear to be relevant, write "NA" for not applicable.

Instructions for each form are provided on the Grants.gov website.

# SECTION L APPLICATION CHECKLIST

### APPLICATION CHECKLIST

[ ] electro	Did you complete the registration process for e-Application for the mandatory onic submission on http://e-grants.ed.gov?
Does	your application include each of the following?
	Cover page (SF 424) marked appropriately with <b>84.133E-1 (Robotics) or 3E-3 (Recreational Technologies).</b> Download of correct package for <b>84.133E-1 4.133E-3</b> applying electronically
[]	Priority Topic identified in the Descriptive Title in Block 12 of the SF 424?
[] any ye	Budget form (ED form 524) with dollar amounts not exceeding the maximum in ear?
[] budge	Voluntary Cost Share included side "B" of the ED 524 and explained in the et narrative for each year?
[]	Budget narrative for each year with arithmetic checked for accuracy
[]	Program narrative, including abstract and responses to the selection criteria
[]	Assurances and Certifications (from the forms list in section K)
[]	Correctly uploaded files on e-Application?
[]	Narrative on the Protection of Human Subjects?
Did you do each of the following?	
[]	Submit application on or before August 14, 2012?
[ ] the su	Fully complete the upload of your application and receive successful validation of bmission before 4:30:00 pm, Washington, D.C. time on the closing date?
	Provide 1 original and 2 copies of the application if submitting by post, hand- ry or carrier service (Although not required, 1 original and 9 copies are requested disk copy) – if you obtained a waiver?

### PAPERWORK BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. Public reporting burden for this collection of information is estimated to average 200 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefits, per the Rehabilitation Act of 1973, as amended (Rehabilitation Act) (29 U.S.C. 701 et seq.) (Program authority: 29 U.S.C. 762(g) and 764(a)). Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20210-4537 or email <a href="ICDocketMgr@ed.gov">ICDocketMgr@ed.gov</a> and reference the OMB Control Number 1820-0027. Note: Please do not return the completed Disability Rehabilitation Research Project Application package to this address.

### **GRANT APPLICATION RECEIPT ACKNOWLEDGEMENT**

If you fail to receive the notification of application within fifteen (15) days from the closing date, call:

U.S. Department of Education Application Control Center (202) 245-6288

### **GRANT AND CONTRACT FUNDING INFORMATION**

The Department of Education provides information about grant and contract opportunities electronically in several ways:

ED Internet Home Page <a href="http://www.ed.gov/">http://www.ed.gov/</a>